

REMARKS

Reconsideration of the Office Action of May 23, 2005 is respectfully requested. Accompanying this Amendment is a one month petition for extension of time with requisite fee.

In the Office Action independent claims 1, 45 and 46 were set forth as being anticipated by the Speedy Packer User's Guide. For the reasons set out below the rejection of these independent claims is respectfully traversed.

As described in the background of the present application, a problem that has plagued the foam-in-bag field is foam ups and spills, with one of the sources of such foam ups and spills being the wrinkling or non-smooth travel of the film moving through the dispenser area. These wrinkles can lead to problems such as poor edge sealing with the potential for unsealed regions that can spill out, poor tracking, jamming of the film within the system, etc.

Claim 1 of the present application presents a foam-in-bag dispenser system that includes a dispenser housing that is "dimensioned as to present a smooth contact surface over all areas of film contact with said housing". This arrangement provides for a relationship between the dispenser housing and the film being fed therepast which is not prone to wrinkling during travel past. This can not be said for the prior art such as the cited Speedy Packer User's Guide .

In the Office Action (figures 1-2; via A and B) are referenced as considering to represent the claimed smooth contact dispenser housing of the present application. The reference to Figure 1-2 is not understood since that figure discloses the outer casing and thus hides the view of the dispenser gun over which the film rides (makes contact). Reference is made to Figure 1-8 showing the interior of the outer casing and Figure 4-2 showing a close up of the dispenser gun and Figure 4-14 showing the film travel path of the film relative to the dispenser gun positioned within the outer casing. It is the dispenser housing over which the film travels and makes contact with so as to generate the wrinkling and poor tracking performance noted above.

The arrangement of the User Guides device is representative of the prior art devices that generate wrinkles, tracking and spill problems. In this regard, reference is

made to the photographs in the provisional application 60/469,042 of which pages H-12 to H-14 are attached herewith as well as close up views of the dispenser gun over which the film travels including both the added cover embodiment and the original coverless embodiment. As seen from these figures the Sealed Air device fails to present a smooth contact surface relative to the film being drawn past it which caused this device to be one of the prior art devices subject to foam ups. These foam ups tend to cause foam adherence to a multitude of surfaces and particularly the cover so as to create the potential for even greater wrinkling and tracking problems (e.g., see the attached Sealed Air figures after a foam up and the build up of foam even after an attempt to clean).

Thus, claim 1 and its dependents are submitted not to be anticipated or rendered obvious by the User's Guide reference as the dispenser housing that the film contacts with does not present a smooth surface over the film contact areas and thus is prone to film wrinkle generation and the additional problems noted above.

Also, as seen from the User's Guide figures the dispenser housing over which the cover is placed includes an electric motor (in the upper region of the housing and a motor that relies on small gears for its drive transmission) and chemical valving. Thus the film travels past these items as well as the mixing module which presents additional nooks and crannies in the region of film travel and close in to the foam up region.

The arrangement of the present invention also facilitates a dispenser main body/film feed relationship wherein the non-folded, non-joined edges of a C-fold film are positioned a distance outward of the interior end of said housing (e.g., see claim 4). This relationship is not shown in the User's Guide as evidenced for example in the attached photographs and also Figures such as Figures 4-10 and 4-11 wherein it is clear that the edge seal is aligned inward of the dispenser housing interior end rather than within or between the dispenser housing inner and outer ends. This lack of smooth surface underlying support in the region being fed to the edge sealer also can degrade edge seal formation with the increased potential for spillage.

As noted above, the motor in the illustrated Sealer Air User's Guide device is positioned in the centralized dispenser gun assembly and thus the motor is part of the assembly past which the film travels over and which is covered over by the plastic cover. This is unlike the present invention (e.g. see claim 8) wherein the motor is positioned so

as to be external to said housing and external to film passing in contact with said housing relative to a surface plane of the film. This provides for a more streamlined dispenser housing assembly that is less prone to generate film wrinkles in the film passing along the housing and adds an additional benefit of providing for an enlargement of the reciprocating member driving motor. Again this feature is not disclosed or suggested in the User's Guide.

The embodiment of the present invention represented by claim 21 further features a dispenser housing that is designed such that (in addition to the motor) the shut off valves, transducers, filter units are spaced a distance inwardly away (in a direction of elongation of the housing) from the interior edge of the film being fed past the dispenser housing. Again, as with the motor, this provides for enlargement of those devices and removal of them from within the film path region to facilitate a streamlined housing less prone to film wrinkle generation. Again, the User Guide's dispenser gun has all these feature grouped in a common assembly lying between the film edges and not exterior thereto.

It is also respectfully requested that if the anticipation rejection is retained features in the dependent claims such as the sliding crank mechanism (claim 7), the pivoting access door (claim 11 – see Figure 4-3 of User's Guide showing a non-pivoting arrangement) and over center toggle clamp (claim 13) be more specifically referenced in the User's Guide said to anticipate the features of these dependent claims as they are not seen in the referenced figures in the Office Action.

Independent claim 45 was rejected as being considered anticipated by the User's Guide. This rejection is respectfully traversed. Claim 45 includes the feature of "said housing having an outwardly diverging upper section and front and rear planar side walls extending down from respective front and rear ends of said outwardly diverging upper section and providing wrinkle avoidance contact surfaces to front and rear film sections being drawn past said dispenser housing". Thus the claim establishes a diverging upper section that extends for a distance and from which the planar side walls extend and that, relative to the film being drawn past, provide wrinkle avoidance contact surfaces. As described above and shown in the attached photographs. New claim 50 further features the streamlined dispenser housing having a design that has a width length greater than the

width of the film which therefore provides smooth wrinkle avoidance contact over the full width of the contacting film material. Accordingly claim 45 and claim 50 are each respectfully submitted to be patentably distinguishable over the User's Guide reference.

Independent Claim 46 was rejected as being anticipated by the User's Guide reference. This rejection is respectfully traversed. Claim 46 includes the feature of –

“a drive mechanism for opening and closing an outlet port in said module, said drive mechanism including a motor supported externally of said dispenser housing and a drive transmission received by said dispenser housing, and said dispenser housing being supported in cantilever fashion such that an inner edge of film width falls between a free end of the cantilevered dispenser housing and said motor during film feed.

Thus, claim 46 describes the above noted feature of placement of the motor external to the film path region (the inner edge of the film falling between the external free end of the cantilevered dispenser housing and the more interior motor) and thus provides the above described advantages set out above. In addition, as noted above, the dispensing gun assembly in the Users Guide that is retained between the edges of the film during bag formation has a small electric motor in that dispensing gun assembly and thus fails to present an arrangement wherein the motor driving the reciprocating member is external to the film path in the fashion set forth in the claim. Accordingly, claim 46 is respectfully submitted to be patentably distinguishable over the User's Guide reference.

New independent claim 47 also features the advantageous arrangement of the dispenser housing relative to film travel in facilitating the avoidance of wrinkle formation in the film being fed past the dispenser housing. As described in claim 47, a vertical cross sectional plane extending through the edge sealer device of the bag forming portion of the foam in bag dispensing system cuts through the dispenser housing between its ends. This design in the dispenser housing facilitates the providing of a smooth contact undersurface to the film material being fed along the dispenser housing in a section of the film where it is highly important to maintain a smooth arrangement which is the section that is fed to the edge sealer. In other words, if wrinkle folding occurs in this area there is potential for a disrupted edge seal and the associated potential for foam spillage and product contamination due to the leakage of not fully formed material escaping such as with the

gases being released during foam formation in the bag. Support for this feature can be seen in the original drawings showing the relationship between the edge sealer and the dispenser housing and the associated disclosure.


A review of the User's Guide such as Figure 4-16 clearly reveals a different arrangement with the entire dispenser housing placed internally of the film edges and internally of the edge sealer location provided on the nip roller arrangement below the dispenser housing. Accordingly, the User's Guide fails to disclose or suggest the claimed arrangement of claim 47 in its effort to provide a highly compact dispenser gun that fits within a small volume centralized area of the film cavity represented by the User's Guide figures.

In view of the foregoing it is respectfully submitted that each of independent claims 1, 45, 46 and 47 stands in condition for allowance as well as the dependent claims depending therefrom. Accordingly, allowance of the present application is respectfully submitted as being appropriate.

If any fees are due in this filing, please charge the fees to Deposit Account No. 02-4300. If an extension of time is necessary and not included herewith, such an extension is requested. The extension fee should be charged to Deposit Account No. 02-4300.

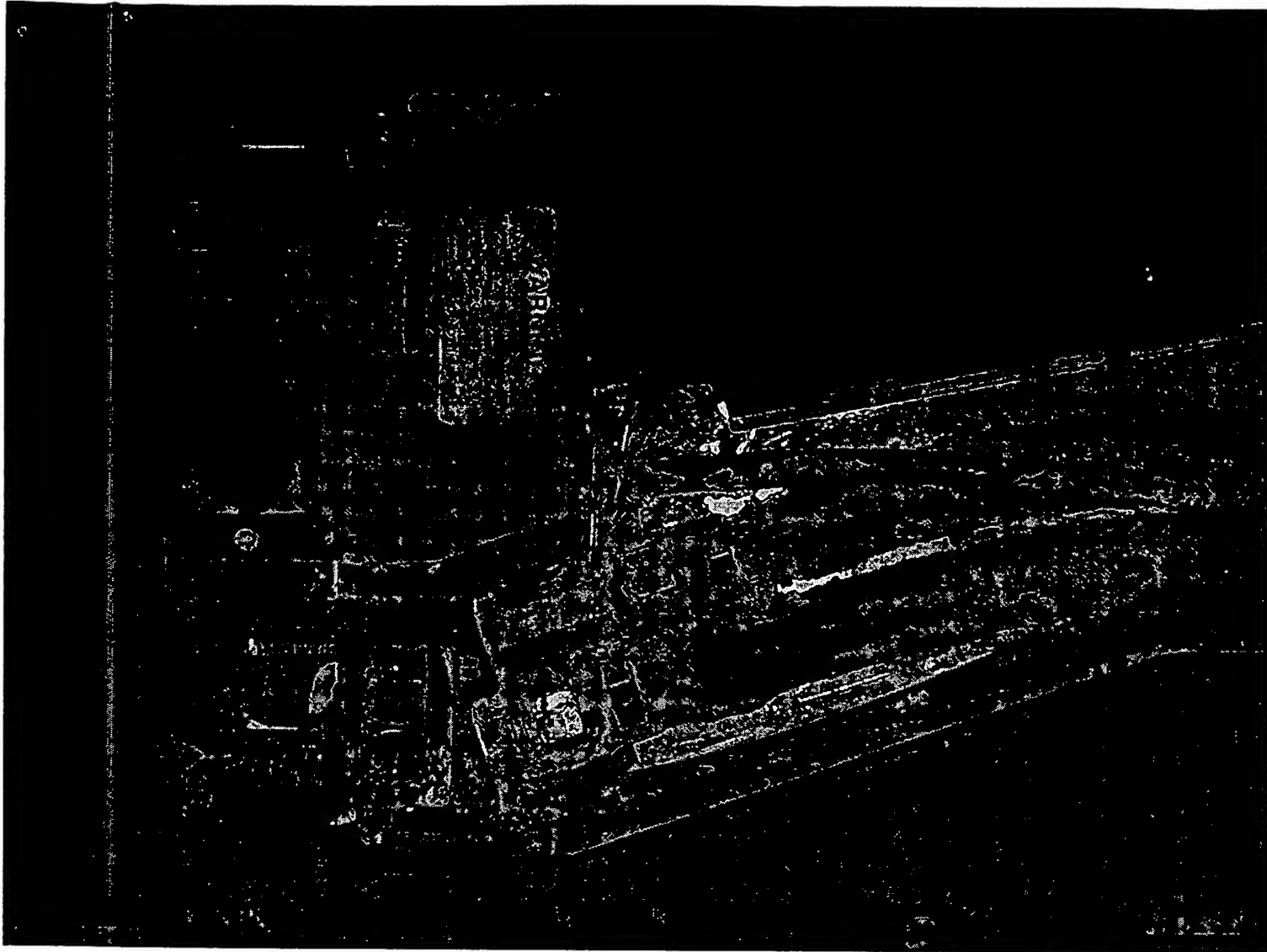
Respectfully submitted,
SMITH, GAMBRELL & RUSSELL, LLP

By:



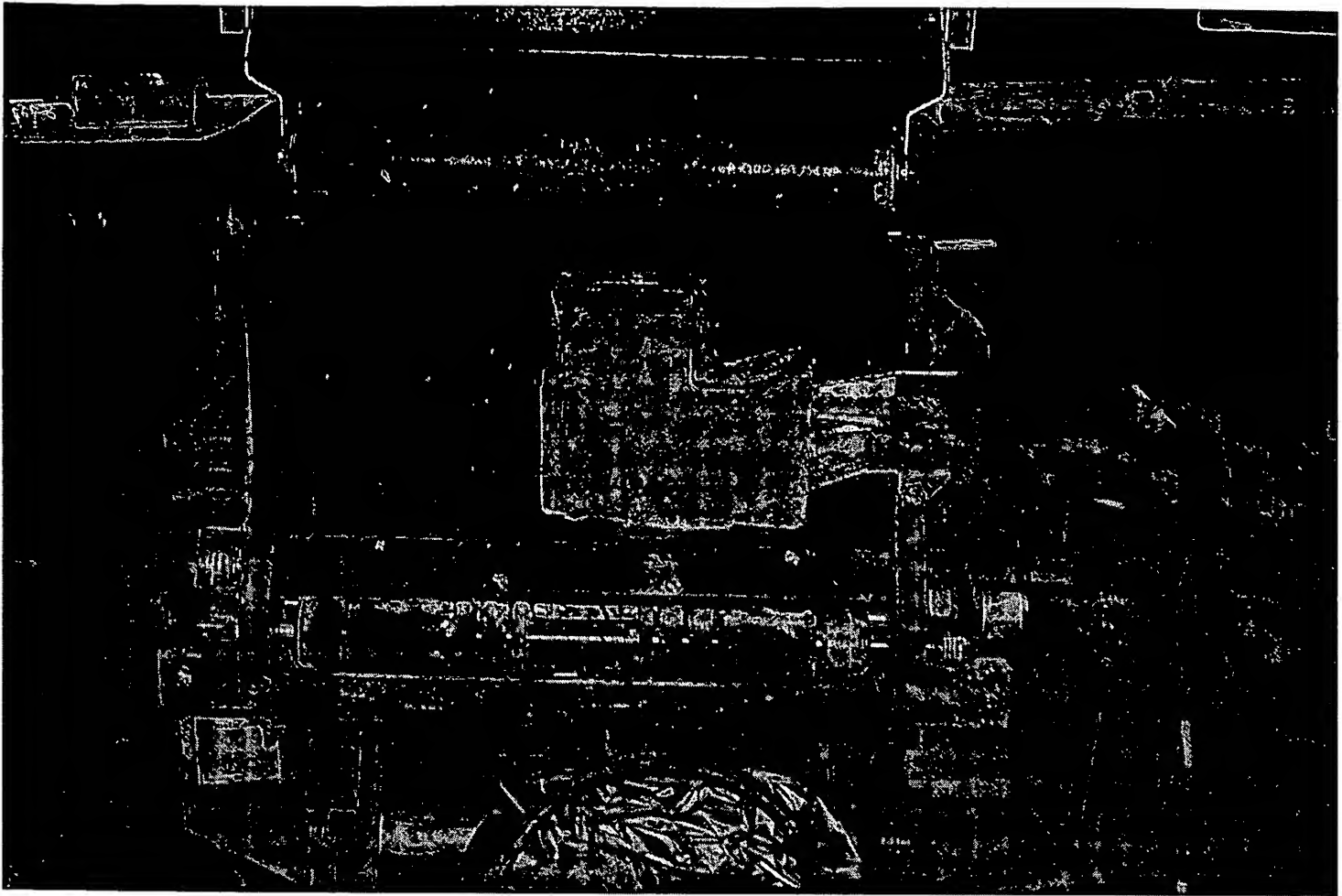
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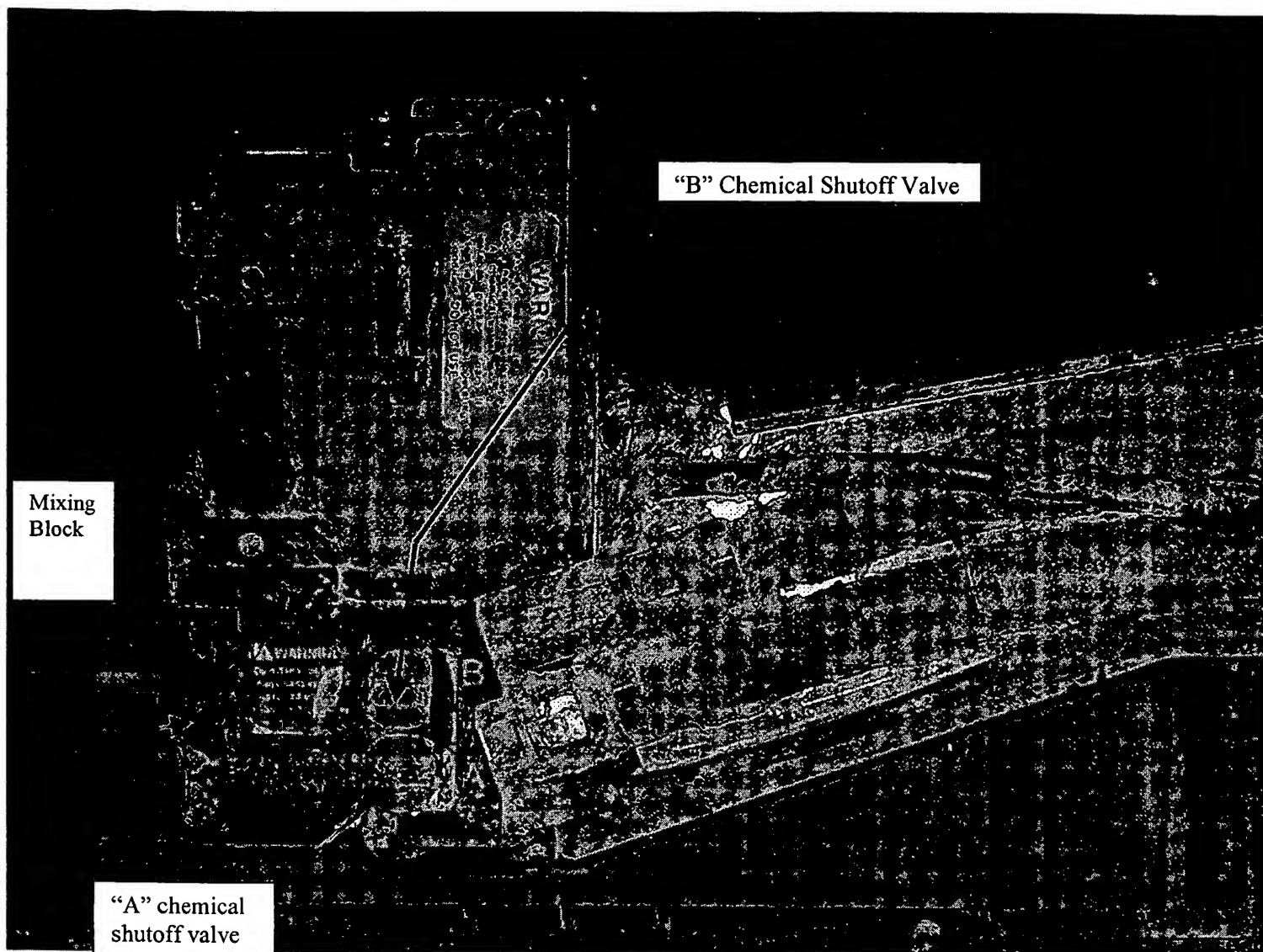
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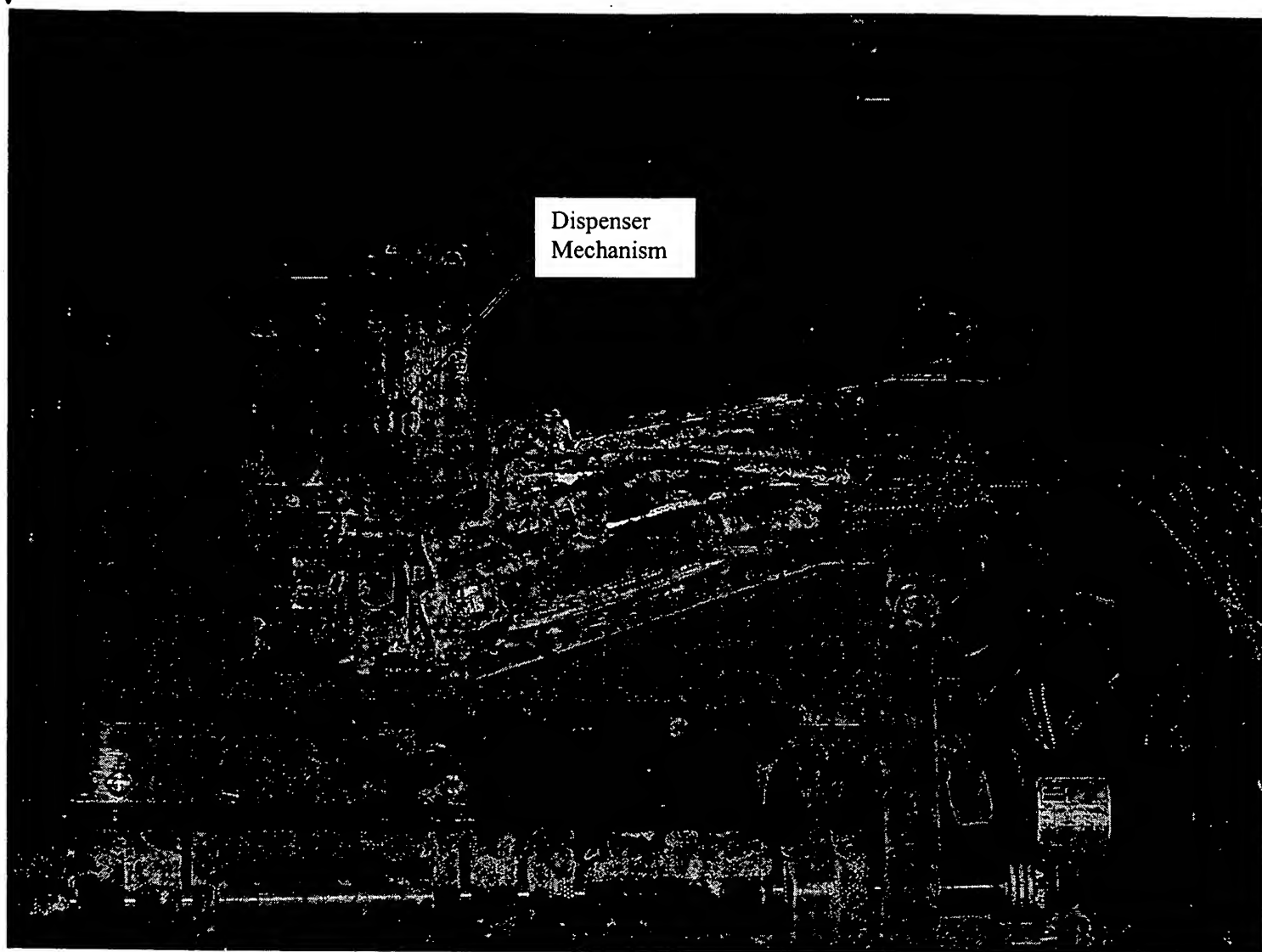
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A close-up view of the dispenser shown in the previous photo, notice the twin chemical shutoff valves, which are located just to the right of the removable mixing block. The lower valve is for the A chemical, the upper valve for the B.

Mixed urethane is famous for flowing into small openings while in the cream or liquid state, then expanding to fill the void with foam, which has a natural tendency to stick to almost any surface when it cures.

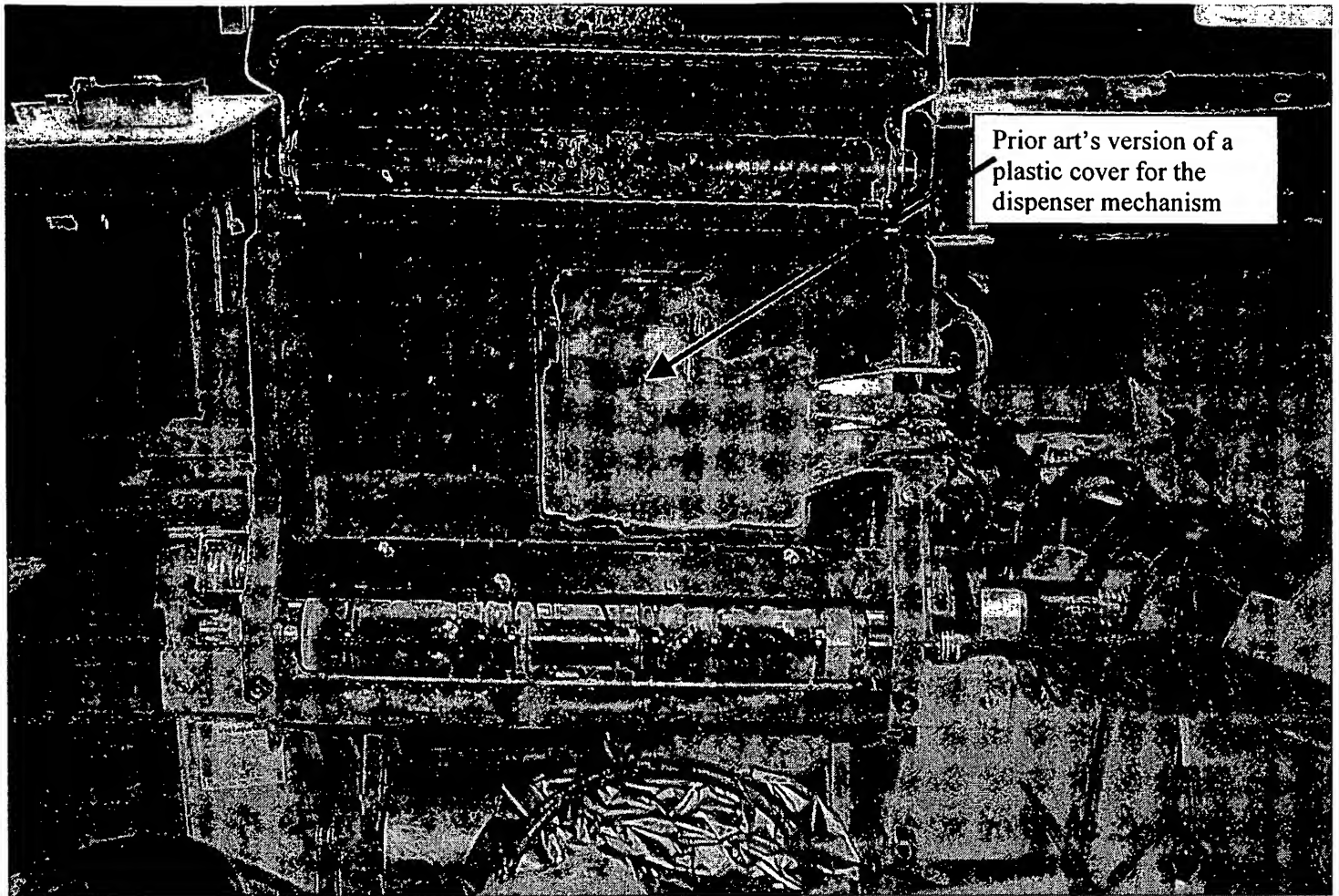


Typical Prior Art Dispenser Mechanism – In Used Condition

View of a commonly used prior art, showing the typical foam build up in all the nooks and crannies of the dispenser mechanism.

The input chemical hoses, can be seen to the right of the dispenser mechanism. The electrical cable can also be seen as it exits the dispenser slightly above one of the chemical hoses.

It can be surmised that this particular system foamed up a few times, as would be expected over the life of a Foam-in-Bag machine. When this happens, removal of all of the foam build-up is next to impossible.



Plastic Cover Intended to Protect the Dispenser Mechanism from Foam

This photo shows the same prior art system as seen in the previous two photos with its original plastic cover in place over the dispenser mechanism.

It can be also surmised from the previous photos that the cover, if installed, did not protect the internals from foam contamination.

The cover is made from a thin piece of thermoformed plastic material, which the foam adheres to with intense affinity.